

Non-Domestic RHI Annual Report 2019-2020



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Executive Summary

The Non-Domestic Renewable Heat Incentive (NDRHI) is a government environmental programme that provides financial incentives to increase the uptake of renewable heat by businesses, the public sector and non-profit organisations. Switching to heating systems that use eligible energy sources can help the UK reduce its carbon emissions and meet its renewable energy targets. Eligible installations receive quarterly payments over 20 years based on the amount of heat generated. This report summarises activity during the ninth year of the scheme, covering the period 01 April 2019 to 31 March 2020.

The number of RHI applications received in 2019-20 was consistent with 2018-19, with just over 1,200¹ total applications made to the scheme. However, this is lower than we have seen in the years before. Historically, Biomass boilers have been the most popular technology type submitted to the scheme each year however, this year there was a shift towards heat pumps, accounting for 65% of new applications. In total 925 applications were approved, taking the total accreditations on the scheme at the end of March 2020 to 20,127.

Payments are made to accredited installations on a quarterly basis and continue for twenty years, so long as participants continue to meet scheme rules. Payments are made based on the actual heat output of the installation. They begin to accrue from the date of accreditation of the installation. Payments made in 2019-20 totalled over £684million, taking the total spend since scheme launch to over £2.5billion. The total installed capacity on the scheme now stands at 5.1GWth and accredited installations have generated an estimated² 45.06TWth of renewable heat.

As part of our commitment to protect taxpayer's money, we undertake a comprehensive audit programme every year to ensure participants are complying with scheme rules. This year we conducted a total of 556 audits. Installations can be selected for audit via two methods, either statistical or targeted. Statistical is where a number of audits are selected randomly from the population, whereas targeted audits are identified through the use of referrals from internal teams and data analytics, where we aim to identify sites that may have an increased risk associated to non-compliance with the scheme. We were able to identify a number of non-compliances through this year's audit work resulting in savings of over £2.1million of public funds.

It has been confirmed that the Non-Domestic RHI scheme will close to new applicants at the end of the 2020-21 financial year in March 2021.

¹ Figure includes all application types, full, preliminary and tariff guarantee.

² Biomethane plants do not directly generate heat (biomethane is injected to the gas grid). An estimate of heat generated from biomethane is calculated by multiplying a calorific value by the amount of biomethane injected into the gas grid.

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Associated Documents

- The Renewable Heat Incentive Scheme Regulations 2018
<https://www.legislation.gov.uk/uksi/2018/611/contents>
- Non-Domestic RHI Main Guidance
<https://www.ofgem.gov.uk/publications-and-updates/non-domestic-rhi-main-guidance>
- Non-Domestic RHI Guidance and Resources
<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources>
- Non-Domestic RHI Tariffs and Payments
<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/non-domestic-rhi-tariffs-and-payments>
- Non-Domestic RHI Public Reports and Data
<https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/public-reports-and-data>

Legislative Context

The Non-Domestic Renewable Heat Incentive (NDRHI) was introduced in England, Scotland and Wales in November 2011 by the Department for Energy and Climate Change (DECC)³ and is a financial incentive designed to encourage the uptake of renewable heating systems. Its aim is to cut carbon emissions in the United Kingdom and to help towards meeting renewable energy targets.

The scheme was set out in legislation under The Renewable Heat Incentive Scheme Regulations 2011⁴ (the Order) and subsequent amendments. Eligible plants that were commissioned on or after 15 July 2009 are eligible to apply for accreditation to the scheme. Eligible technologies include Biomass boilers; Air Source and Ground Source Heat Pumps; Solar Thermal systems; Deep-Geothermal; Biogas-combustion systems; Combined Heat and Power (CHP) systems using a range of renewable fuels and sources, and the production of Biomethane for injection into the gas-grid. There are various tariff bands for each technology type, these are set by the Department for Business, Enterprise and Industrial Strategy (BEIS) and are reviewed regularly.

In March 2016, BEIS published a consultation on changes to the scheme. After taking into account the feedback they received, BEIS published its consultation response⁵ on 14 December 2016. The changes would come into force on 22 May 2018 as a new piece of legislation, The Renewable Heat Incentive Scheme Regulations 2018⁶. The changes included the introduction of Tariff Guarantee (TG) applications, allowing applications to secure a tariff rate before their installation is commissioned and fully accredited on the scheme. There were also changes to Shared Ground Loop (SGL) systems, feedstock requirements for Biomethane production and biogas combustion and some changes to eligible heat uses. Ofgem has published details of all changes made over the duration of the scheme.⁷

On 11 March 2020, in response to the Covid-19 pandemic, the Chancellor of the Exchequer announced as part of his Budget, that there would be an extension granted to current TG projects that had experienced delays in commissioning their plant as a result. It was also announced that a third allocation of TG's would be available and it was confirmed that the scheme would close to new applicants as expected on 31 March 2021.⁸

³ From July 2016 the new Department for Business, Energy and Industrial Strategy assumed the roles and responsibilities of the Department of Energy and Climate Change (DECC)

⁴ Regulations were revoked and superseded by The Renewable Heat Incentive Scheme Regulations 2018

⁵ <https://www.gov.uk/government/consultations/the-renewable-heat-incentive-a-reformed-and-refocused-scheme>

⁶ <https://www.legislation.gov.uk/uksi/2018/611/contents>

⁷ <https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/about-non-domestic-rhi/changes-non-domestic-rhi>

⁸ <https://www.gov.uk/government/publications/changes-to-the-renewable-heat-incentive-rhi-schemes/changes-to-rhi-support-and-covid-19-response>

We continue to work closely with BEIS to ensure the scheme is being delivered effectively and in accordance with policy, and to implement changes made to the legislation.

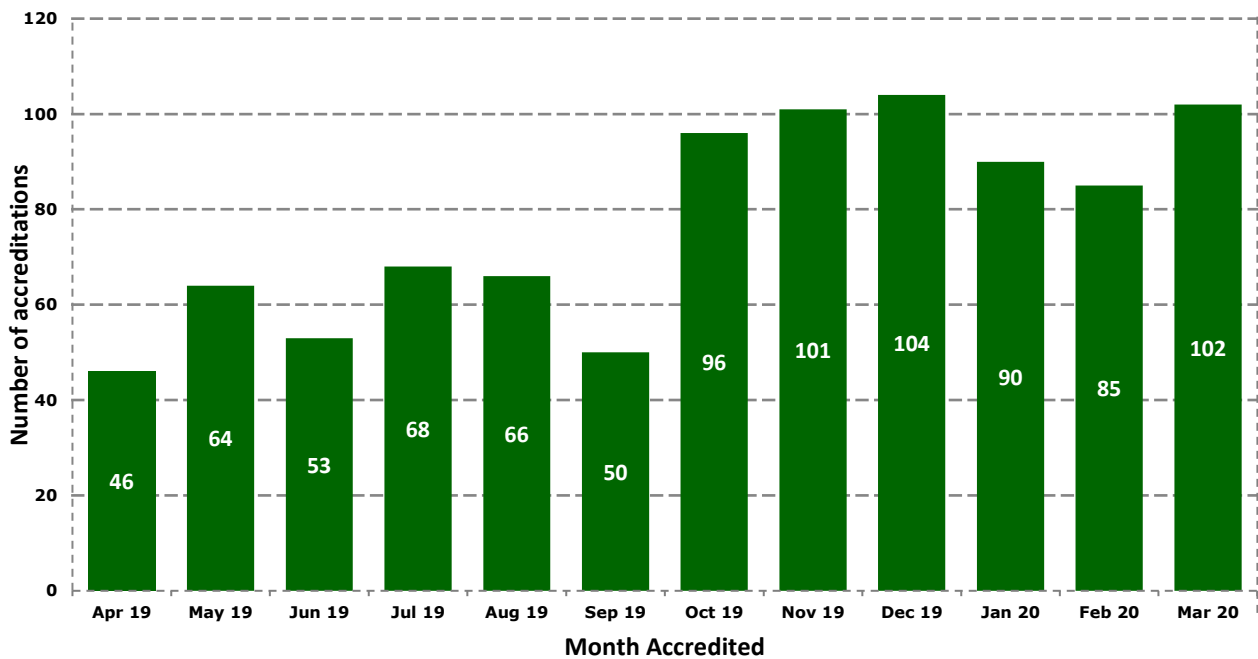
The Gas and Electricity Markets Authority (the Authority) is the statutory body responsible for administering the RHI scheme in Great Britain (GB). The Authority's functions are performed by Ofgem, the office of the Authority. As administrator, Ofgem performs a number of functions including publishing guidance, the review of applications to join the scheme and ensuring that accredited scheme participants continue to meet their ongoing obligations. We receive and check participants' meter readings and other periodic data submissions before making periodic support payments. Ofgem is also responsible for ensuring the scheme is guarded against fraud and error which is done via an extensive audit programme.

The Regulations require us to produce and publish an annual report on the scheme by 31 July following the end of a scheme year. The contents of the report are set out in the order, however we do include further information that we believe is of interest to stakeholders and the general public.

1. Accreditations

- 1.1. In 2019-20, 922 new installations were accredited on to the scheme and we completed three bio-methane registrations.
- 1.2. There was a slight drop in the number of full applications, with 1,002 received in 2019-20, compared to 1,088 in 2018-19.
- 1.3. Similarly, we received seven Preliminary applications, a small drop down from nine in 2018-19.
- 1.4. However, there was an increase in the number of Tariff Guarantee (TG) applications received, up to 210 from 166. This increase was due to the Department for Business, Energy and Industrial Strategy (BEIS) introducing new legislation in July 2019 to extend the allocation of TG applications by an additional year to 31 January 2021.

Figure 1.1: Accredited Full Applications



- 1.5. As with previous years, we see a spike in the volume of accreditations towards the middle and end of the financial year. This can partially be attributed to tariff depression, specifically this year in relation to large Ground Source Heat Pumps.
- 1.6. However, the increase in accreditations towards the middle and end of the financial year is not only related to depression detailed at 1.5. It also relates to the number of applications processed in earlier months (rejected and approved) in the financial year. The total number of applications processed per month was consistent across the year (c. 100 per month), earlier in the year, similar numbers of rejections were taking place per

month as approvals. Applications that were rejected in the early part of 2019-20 were re-submitted later in the year after they obtained the required eligibility evidence including in many instances, planning permission. Now that all evidence requirements had been met following reapplication, we were able to accredit some of these more complete applications to the scheme later in the year; hence contributing to the approval spike towards the end of the year.

1.7. The total number of accredited installations at the end of March 2020 is 20,127.

Figure 1.2: Proportion of Accredited Installations by Technology Type

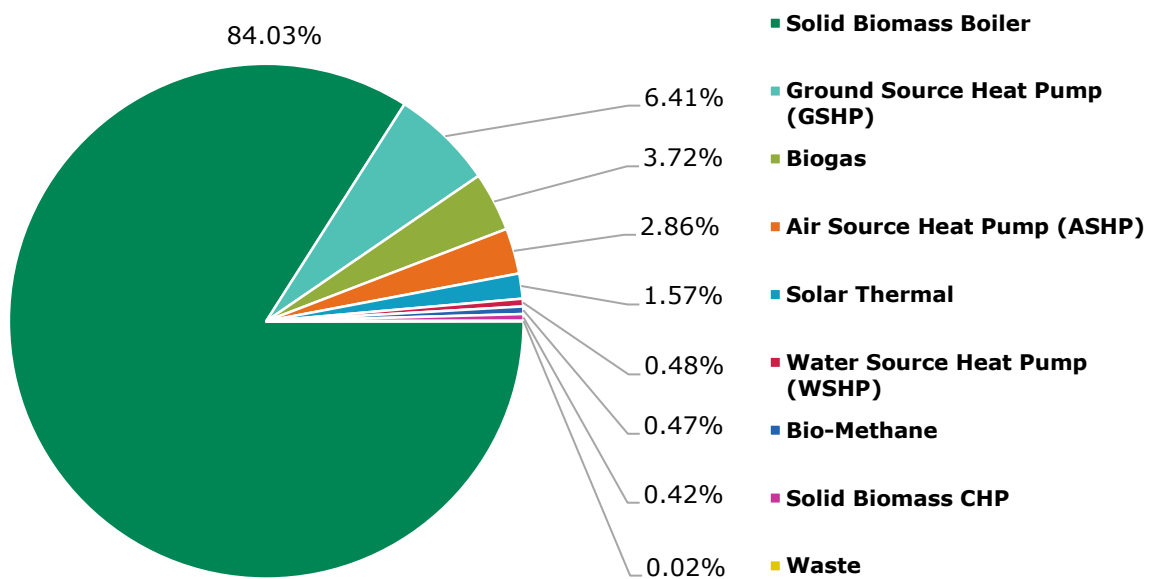
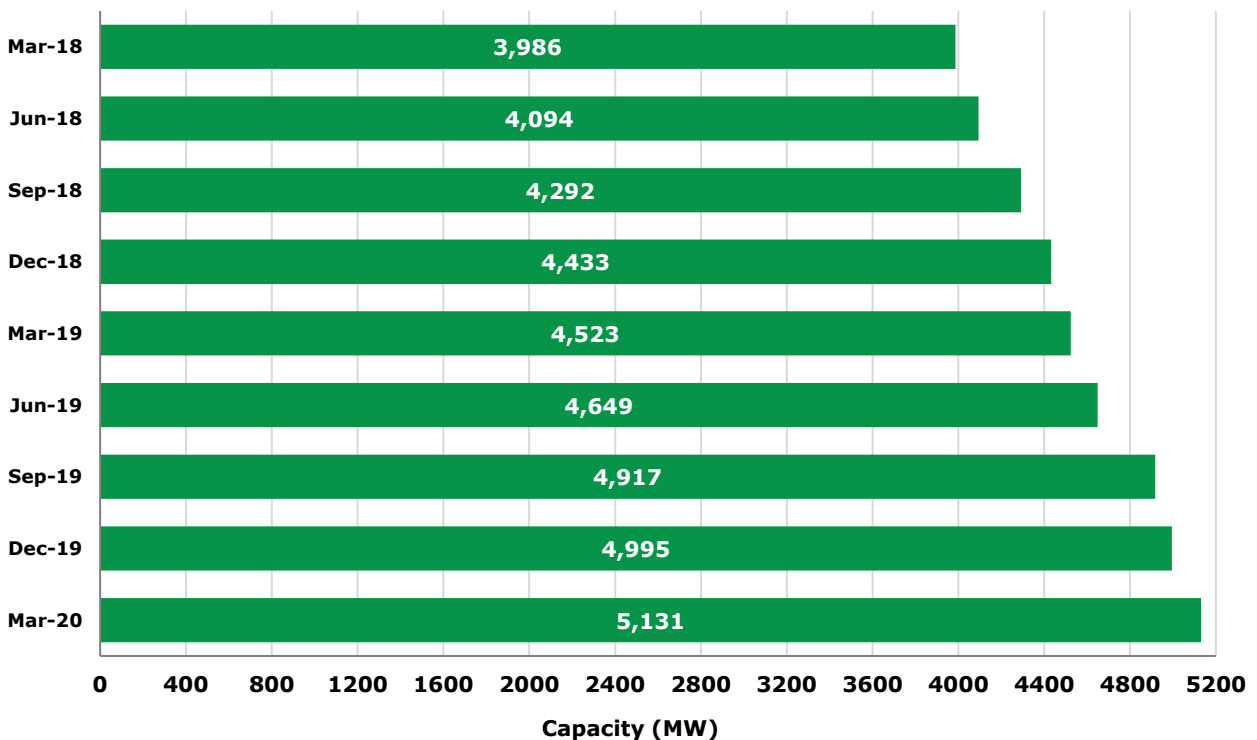


Table 1.1: Accredited Installations by Technology Type

Technology Type	Total
Air Source Heat Pump (ASHP)	576
Biogas	749
Bio-Methane	95
Ground Source Heat Pump (GSHP)	1,291
Solar Thermal	317
Solid Biomass Boiler	16,913
Solid Biomass CHP	85
Waste	4
Water Source Heat Pump (WSHP)	97
Grand Total	20,127

- 1.8. As can be seen from **Figure 1.2** and **Table 1.1**, Biomass boilers are the most commonly installed technology under the Non-Domestic RHI scheme.
- 1.9. During 2019-20, we accredited 608MW of heat capacity to the scheme, increasing the overall capacity on the scheme to 5,131MW.

Figure 1.3: Non-Domestic RHI Cumulative Approved Capacity (MW)



- 1.10. **Figure 1.3** above shows the cumulative approved capacity to the scheme at quarterly intervals, since March 2018. The installed capacity on the scheme has continued to increase at a consistent rate in line with previous years.

Geographic Distribution of Accredited Installations

- 1.11. **Figures 1.4** and **1.5** show the split in both the number of accreditations and the installed capacity of accreditations across Great Britain.
- 1.12. As expected, the majority of Non-Domestic RHI accreditations are in England.
- 1.13. As can be seen, the split of installations and approved capacity is closely correlated across Great Britain.

Figure 1.4: Accredited installations and registered bio-methane producers by country

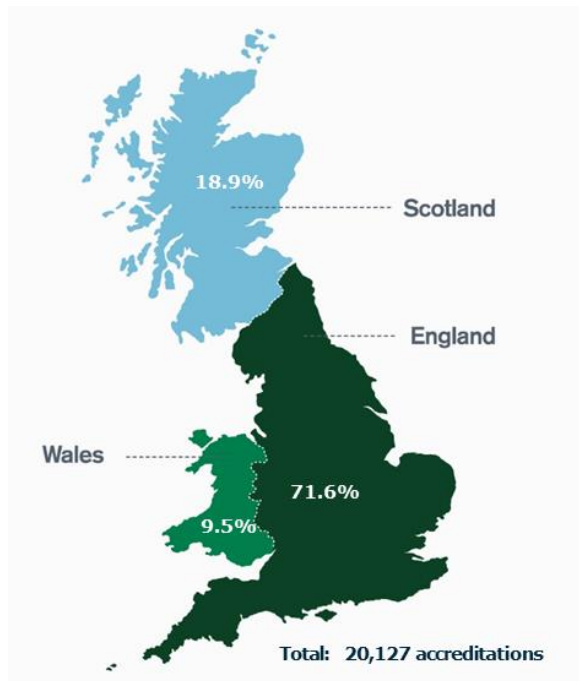
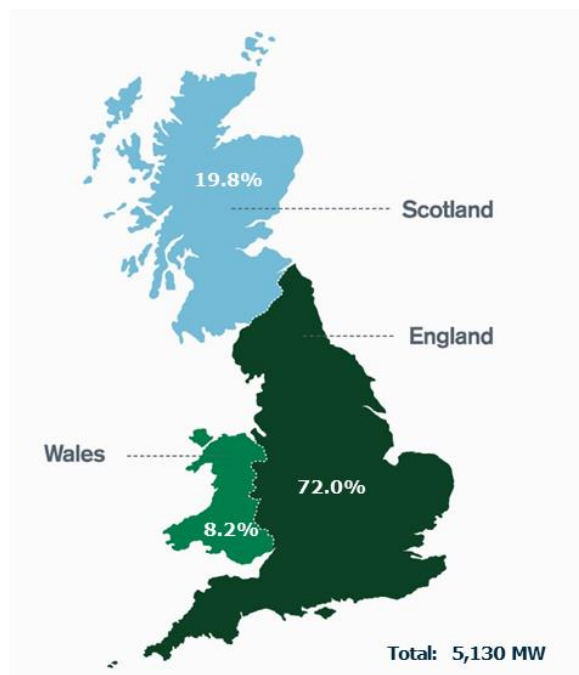


Figure 1.5: Non-Domestic RHI total approved capacity by country (%)



Tariff Guarantee’s

- 1.14. A Tariff Guarantee (TG) provides investment certainty to larger installations, which are crucial to delivering the UK Net Zero target.
- 1.15. A TG allows applicants to the scheme to secure a tariff rate before their installation is commissioned and fully accredited. Since TG applications were introduced to the scheme

in May 2018 we have received 377 applications in total. Of these over 20% (78) were received in March 2020 alone.

- 1.16. At the end of 2019-20 we had granted 58 full TG's with a committed spend of £101million. There is a remaining TG budget allocation of £27m for 2020-21.
- 1.17. BEIS have confirmed that there will be a further flexible allocation of TG's.⁹ This new allocation requires plant to have submitted Stage 2 information, which evidences financial close, prior to the closure of the Non-Domestic RHI to new applicants on 31 March 2021.
- 1.18. BEIS intends to set new TG budget headrooms for the 2021-22 and 2022-23 financial years. In addition, they confirmed that headrooms have been set for some individual and group technologies, these are set out in their consultation response.

⁹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/896387/Gov_Response_-_Notice_on_Changes_to_RHI_Support_and_Covid-19_Reponse_FINAL.pdf

2. Payments

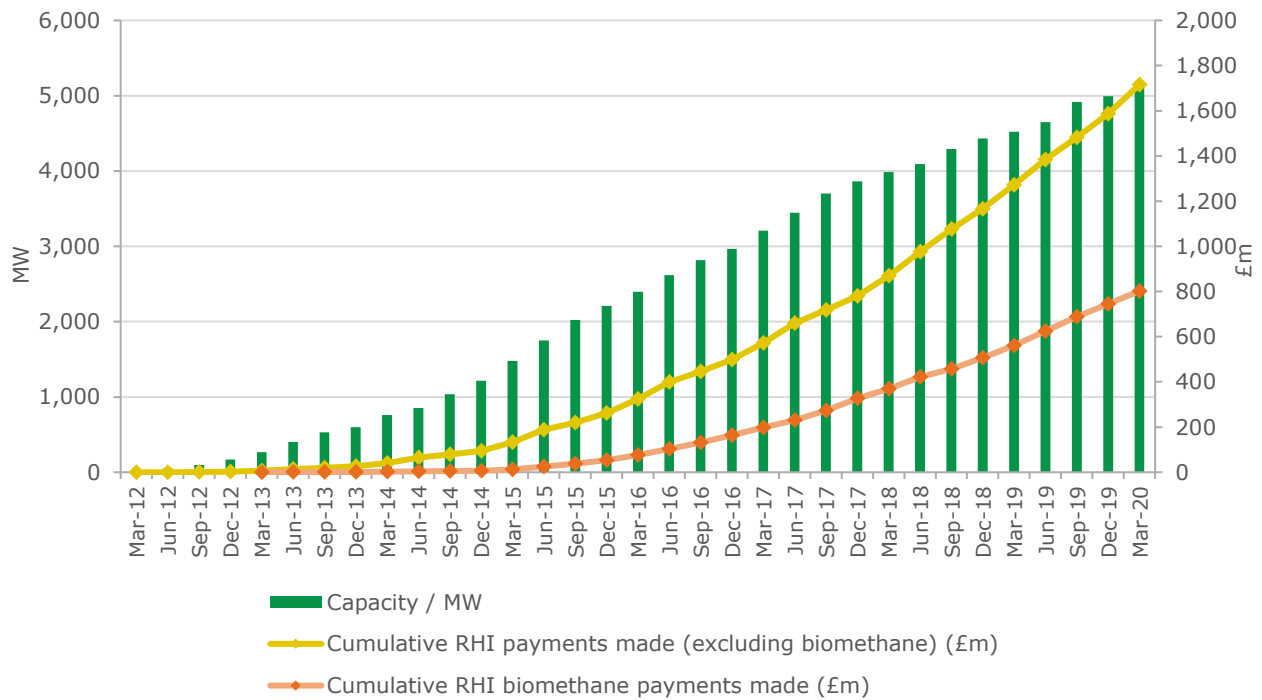
- 2.1. RHI payments are made quarterly for twenty years, and are based on the eligible heat generated by the plant. Payments made to Biomethane producers follow a separate calculation formula because heat is not generated in the process, instead payments are based on the amount of Biomethane injected directly to the gas grid. Payments are only made to accredited installations that continue to meet the scheme rules.
- 2.2. The tariff rates are set by the Department for Business, Energy and Industrial Strategy (BEIS) and are regularly reviewed. Any changes to tariffs must be announced at least one month in advance of the change.
- 2.3. In 2019-20, the total heat generation by accredited plants was 12.39TWh, which equated to over £684million of support payments. The total value of support payments made on the RHI scheme since its launch in 2011, now stands at £2.5billion at the end of March 2020.

Table 2.1: Non-Domestic RHI payments made to date

Technology Type	Payments (£m)	Percentage (%)
Air Source Heat Pump (ASHP)	£1.56	0.06%
Biogas	£147.73	5.87%
Bio-Methane	£801.95	31.86%
Ground Source Heat Pump (GSHP)	£37.97	1.51%
Solar Thermal	£0.84	0.03%
Solid Biomass Boiler	£1,457.43	57.90%
Solid Biomass CHP	£60.46	2.40%
Waste	£2.29	0.09%
Water Source Heat Pump (WSHP)	£7.04	0.28%
TOTAL	£2,517.27	100%

- 2.4. As can be seen from **Table 2.1**, biomass boilers account for the largest proportion of payments on the scheme. This is to be expected given that they account for over 84% of total accreditations.
- 2.5. Biomethane plants, accounting for only 0.47% of accreditations, actually account for 31.86% of payments on the scheme.

Figure 2.1: Approved capacity and cumulative payments



2.6. **Figure 2.1** shows the cumulative capacity and payments made at quarterly intervals from March 2012, when the first payments were issued. The capacity figures are based on active full accreditations from June 2014. Prior to that, the figures included both preliminary and full accreditations.

3. Audit and Assurance

- 3.1. Our audit strategy has been developed in line with best practice from the National Audit Office (NAO). Our strategy is reviewed annually and a plan is produced to track delivery.
- 3.2. We undertake both statistical and targeted audit programmes. The statistical audit programme is designed to be delivered with a 95% confidence level, which provides us with assurance that the results of audits will reflect the level and types of non-compliance within the scheme population.
- 3.3. Targeted audits are identified through the use of referrals from internal teams and data analytics, where we aim to identify sites that may have an increased risk associated to non-compliance with the scheme. This includes cross-referencing information with the other schemes we administer.
- 3.4. Non-compliance levels on the scheme decreased compared to the previous year, with the estimated level of error based on the statistical audit programme being just over 1% of payments. Last year the error rate was over 2% of payments.
- 3.5. We will continue to monitor non-compliance through our audit programme and work closely with the Compliance function and Operations to ensure we have the right controls in place to maintain low levels of non-compliance.
- 3.6. **Table 3.1** below details the outcomes of the 2019-20 audit programme.¹⁰
- 3.7. We conducted 556 audits throughout the year as part of our commitment to ensure compliance on the scheme.

Table 3.1: Non- Domestic RHI Audit Results 2019-20

Audit Type	Site Visits Conducted	Closed Audits	Open Audits
Statistical	329	329	0
Targeted	227	139	88

- 3.8. Our compliance team completed 430 investigations during the year and this has resulted in over £2.1million being identified as monies paid out in error, which is expected to be recovered.

¹⁰ A number of audits remain open due to the Covid-19 pandemic preventing returns to site to complete further evidence gathering.

Table 3.2: Compliance Cases 2019-20

Referral Source	Cases Closed	Non-Compliant: Material	Non-Compliant: Non-Material	Cost of Non-Compliance
Audit	317	29	288	£1,726,414
Operational	105	47	58	£387,928
Counter Fraud / External Investigation	8	2	6	£13,222
Total	430	78	352	£2,127,564

3.9. Non-compliance can be either material or non-material. Material non-compliance can have a financial impact and lead to funds being paid out in error.

3.10. Ofgem is continuing to work to reduce non-compliance levels in the scheme by understanding the root causes of non-compliance and introducing new controls to address them.

3.11. We have increased our engagement with external parties, including Woodsure and the Environment Agency, to better target our audit programme, particularly regarding fuelling and sustainability issues.

3.12. Some non-compliances will be resolved by participants providing the information after the audit. Others will result in recoupment of overpayments or, in the worst cases of non-compliance revocation of accreditation.

3.13. The most common reason for non-compliance with the scheme regulations are as follows:

- Eligibility
- Heat generation from an ineligible plant
- Sustainability requirements
- Lack of fuel records
- Incorrect schematic diagram

4. Our Administration

- 4.1. As administrators of the scheme, Ofgem performs a number of functions such as the review of applications and amendments, calculating and making payments, responding to enquiries and ensuring participants ongoing compliance with scheme regulations.
- 4.2. In order to ensure that we are providing a good service, we track our performance monthly and publish details on the Ofgem website.¹¹
- 4.3. 2019-20 has been a challenging year, an increase in enquiry volumes coupled with constraints around funding and resource, has led us to make changes to some of our administrative functions in a bid to improve our efficiency.
- 4.4. One of the steps taken was the creation of a 'One Ofgem' enquires team, where staff are trained across the multiple schemes we administer. This has increased our capacity to respond to enquiries within timescales and the ability to flex resource to areas when required. This should further improve our performance into 2020-21.
- 4.5. Due to the complexity of Non-Domestic RHI applications, we encourage applicants to seek guidance on completing their applications to enable these to be processed more efficiently and therefore reducing the need for additional dialogue after submission of the application.
- 4.6. Despite the scheme closing at the end of 2020-21, Ofgem is still responsible for carrying out its administrative functions for at least a further 20 years. We are currently undergoing a review of our systems that support the Non-Domestic RHI scheme. This review is intended to identify areas that we can enhance functionality that will support our delivery of the scheme.

¹¹ <https://www.ofgem.gov.uk/environmental-programmes/environmental-programmes-ofgem-s-role-and-delivery-performance>

5. Looking Forward

The Government have announced that the Non-Domestic RHI will close to new applications after the 31 March 2021. The Non-Domestic RHI provides payments over a 20 year period meaning that the scheme will still potentially be servicing participants up until 31 March 2041. We are reviewing systems that support our Non-Domestic scheme and are planning to enhance this functionality which will support ongoing operational delivery of the scheme.

Deployment for the beginning of 2020-21 year has been consistent with the volume of applications received in 2019-20 despite the Covid-19 situation. We anticipate that deployment will pick up as we progress throughout the year especially as we approach the closure of the Non-Domestic RHI scheme. From our experience of application numbers on other schemes we administer such as the Renewables Obligation and the Feed-in-Tariff we expect a significant ramp-up of applications on the Non-Domestic RHI over the last quarter of the scheme.

Ofgem will be making preparations for the closure of the Non-Domestic RHI scheme which will include updating guidance and implementing counter-fraud measures. Our targeted audit campaign for biomass tariff reduction in September 2017 identified that 49% of installations audited were either not commissioned or commissioned after the tariff change date. Ofgem has a zero tolerance to fraud and will be deploying similar audit campaigns and counter-fraud measures for the closure of the scheme. We encourage all prospective applicants to have all the necessary evidence in place before submitting applications.

On the subject of Non-Domestic RHI closure, the Department for Business, Energy and Industrial Strategy (BEIS) have already run two consultations on the scheme in 2020-21. The Non-Domestic RHI: ensuring a sustainable scheme¹² and the Changes to RHI support and Covid-19 response¹³ consultations opened on the 28 April 2020 with the former closing to responses on the 7 July 2020 and the latter closing on the 19 May 2020. The government response to the latter consultation has already been released.¹⁴ The extensions to Tariff Guarantee deadlines introduced by this response have recently taken place and a full summary of these recent changes are available on our website.¹⁵

Looking beyond the closure of the Non-Domestic RHI, BEIS ran a consultation from 28 April 2020 to 7 July 2020 on the 'Future support for low carbon heat',¹⁶ which included the proposal for a 'Green Gas Support Scheme'. This proposed scheme is considered to be a successor to

¹² <https://www.gov.uk/government/consultations/non-domestic-renewable-heat-incentive-ensuring-a-sustainable-scheme>

¹³ <https://www.gov.uk/government/publications/changes-to-the-renewable-heat-incentive-rhi-schemes>

¹⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/896387/Gov_Response_-_Notice_on_Changes_to_RHI_Support_and_Covid-19_Response_FINAL.pdf

¹⁵ <https://www.ofgem.gov.uk/publications-and-updates/changes-non-domestic-rhi-regulations-july-2020>

¹⁶ <https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>

the Non-Domestic RHI for Biomethane installations and is expected to open in October 2021. For more information on the development of this proposed scheme please see the link provided.